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EXAMINER

BRIER, JEFFERY A

ART UNIT	PAPER NUMBER
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2628

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/29/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/805,091

Applicant(s)

MCWALTER ET AL.

Examiner

Jeffery A. Brier

Art Unit

2628

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 December 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

Art Unit: 2628

DETAILED ACTION

Oath/Declaration

1. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

The second inventor did not date his execution of the declaration. See MPEP 602 II Statutory Declarations at pages 600-32 and 600-33 which states.

Section 1746 of Title 28 of the United States Code provides:

Whenever, under any law of the United States or under any rule, regulation, order, or requirement made pursuant to law, any matter is required to be supported, evidenced, established, or proved by sworn declaration, verification, certificate, statement, oath or affidavit, in writing of the person making the same (other than a deposition, or an oath of office, or an oath required to be taken before a specified official other than notary public), such matter may, with like force and effect, be supported, evidenced, established, or proved by the unsworn declaration, certificate, verification, or statement, in writing of such person which is subscribed by him, as true under penalty of perjury, and dated, in substantially the following form:

[1] If executed without the United States:

"I declare (or certify, verify, or state) under penalty of perjury under the laws of the United States of America that the foregoing is true and correct. Executed on (date).

(Signature)."

[2] If executed within the United States its territories, possessions, or commonwealths:

"I declare (or certify, verify, or state) under penalty of perjury that the foregoing is true and correct. Executed on (date).

(Signature)."

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description:

120b used in figure 4 is not found in the specification, see page 13 line 20 where 120b could be inserted to reference Hitachi SH4 of figure 4.

402a, 402b, 402n used in figure 5 is not found in the specification, see page 15 lines 13 and 19 which only uses 402; and

432 used in figure 5 to point to a dashed line is not found in the specification, note paragraph [0037].

Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Art Unit: 2628

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description:

flow controller 415 discussed at page 15 line 20.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. The drawings filed on 12/10/2004 did not have the label Replacement Sheet as required by 37 CFR 1.121(d) which states:

(d) *Drawings*: One or more application drawings shall be amended in the following manner: Any changes to an application drawing must be in compliance with § 1.84 and must be submitted on a replacement sheet of drawings which shall be an attachment to the amendment document and, in the top margin, labeled "Replacement Sheet". Any replacement sheet of drawings shall include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is amended. Any new sheet of drawings containing an additional figure must be labeled in the top margin as "New Sheet". All changes to the drawings shall be explained, in detail, in either the drawing amendment or remarks section of the amendment paper.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

5. The disclosure is objected to because of the following informalities:

At page 1 line 12 the copending application's serial number needs to be inserted. It appears the serial number is 10/805,065;

At page 14 line 1 the acronym JTC is present, however, JTC has not been defined in the specification; and

At page 21 lines 9 and 10 the specification refers to updates as 5% and 1%, however, the use of percent does not clearly describe the update.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1:

At line 4 "the graphics card" lacks antecedent basis in the claim.

At line 9 "manipulation of the image data" is claimed but the Detailed Description starting at page 9 of the specification only describes performing interpolation based upon current and previous image data received from the application buffer, see page 22 of the specification. Since the term manipulation is a very broad term the scope of the claimed manipulation is unclear.

At line 1 "displaying a user interface" is claimed while at line 2 "a display panel configured to display image data" is claimed. It is not clear if the user interface at line 1 is the display image data at line 2 and lines 10-11.

Claim 2:

This claim does not limit the manipulation to interpolation since it is a comprising claim that does not positively limit the manipulation to interpolation.

Claim 8:

The scope of this claim is unclear because if the logic element was purely software then no means is claimed that actually performs the claimed function.

Claim 9:

This claim is unclear as to the means that is the claimed "logic" at lines 4, 5, and 7 in view of claim 10.

Claim 10:

At line 1 "each logic element" lacks antecedent basis in the claim. The scope of this claim is unclear because if the logic element was purely software then no means is claimed that actually performs the claimed function.

Claim 11:

This claim is unclear as to the means that is the claimed "logic" at lines 1 and 3 in view of claim 10. It is not clear the function the logic is performing since when the update time periods are expired then there should be no more updated image in need of capture. The specification does not assist in understanding this claim.

Claim 12:

This claim is unclear as to the means that is the claimed "logic" at lines 2 and 3 in view of claim 10. At line 2 "manipulating the capture updated image data" and at lines 2 and 3 "the logic for manipulating being configured to perform interpolation" is claimed

Art Unit: 2628

but the Detailed Description starting at page 9 of the specification only describes performing interpolation based upon current and previous image data received from the application buffer, see page 22 of the specification. Since the term manipulation is a very broad term the scope of the claimed manipulation is unclear even in light of the claimed interpolation because this claim does not limit the manipulation to interpolation since it is a comprising claim that does not positively limit the manipulation to interpolation.

Claim 14:

At lines 9 and 10 “most recent image data of the draw manager” and “previous image data of the draw manager” is claimed, however, at line 4 the draw manager only receives data from the application buffer. It is noted the specification at page 21 lines 21-23 uses similar language but the language does not assist in determining what is “image data” of the draw manager since it receives only data from the application buffer. It is not clear if the current and previous image data corresponds to the first rate or to the second rate.

Claim 15:

The claim claims a “system buffer”, however, the specification does not describe a system buffer and the claims do not clarify how the draw manager includes a system buffer, thus, the metes and bounds of this claim is unclear.

Claim 16:

This claim also claims a “system buffer” and the analysis given for claim 15 applies to this claim.

Art Unit: 2628

Claim 19:

At line 1 "the method operation" lacks antecedent basis in the claim.

Claim Rejections - 35 USC § 101

8. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. Claims 9-13 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. These claims do not claim a useful, concrete, and tangible result of the draw manager. The claimed "memory module for", "logic for transmitting the image data", "logic for determining an update time", and "logic for transmitting updated image data for display" are abstract entities which do not claim a useful, concrete, and tangible result. *State Street Bank & Trust Co. v. Signature Financial Group Inc.* (CA FC) 47 USPQ2d 1596, 1603 (7/23/1998). *AT&T Corp. v. Excel Communications Inc.* (CA FC) 50 USPQ2d 1447. On page 1603 first paragraph the CAFC wrote in *State Street*:

Under *Benson*, this may have been a sufficient indicium of nonstatutory subject matter. However, after *Diehr* and *Alappat*, the mere fact that a claimed invention involves inputting numbers, calculating numbers, outputting numbers, and storing numbers, in and of itself, would not render it nonstatutory subject matter, unless, of course, its operation does not produce a "useful, concrete and tangible result." *Alappat*, 33 F.3d at 1544, 31 USPQ2d at 1557. 7

On page 1603 paragraph labeled [4] the CAFC wrote:

Art Unit: 2628

[4] The question of whether a claim encompasses statutory subject matter should not focus on which of the four categories of subject matter a claim is directed to -- process, machine, manufacture, or composition of matter-- but rather on the essential characteristics of the subject matter, in particular, its practical utility. Section 101 specifies that statutory subject matter must also satisfy the other "conditions and requirements" of Title 35, including novelty, nonobviousness, and adequacy of disclosure and notice. See *In re Warmerdam*, 33 F.3d 1354, 1359, 31 USPQ2d 1754, 1757-58 (Fed. Cir. 1994).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1-12 and 14-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al., US Patent Application Publication no. 2003/0189597, in view of Hirosawa et al., US Patent no. 4,550,386.

Anderson et al. teaches an active window is present in each desktop, see paragraphs [0037]-[0040], and teaches that in response to the user selecting a desktop that desktop is displayed wholly on the display. Therefore, Anderson teaches selecting one desktop without informing the non-selected desktop's window that it is out of focus.

Art Unit: 2628

Anderson also teaches manipulating the image data received from a selected desktop having an application by animation, see paragraphs [0035]-[0036].

Hirosawa et al. teaches a plurality of programs that are allowed to operate simultaneously but only two of the applications are visualized on the video data terminal at any one time and each application is not informed of this, see column 3 lines 47-54 and column 13 lines 9-25, and each application writes to its own application buffer, VBUF 38, LBUF 37, etc whose contents then are written in RBUF 39 for display on the video data terminal 16, see column 5 lines 15-27, column 5 line 65 to column 6 line 7, column 7 lines 61-65, and column 11 lines 26-29.

A detailed analysis of the claims follows.

Claim 1:

The combination of Anderson and Hirosawa teaches a system for displaying a user interface for a telematics client (Anderson: see figure 6.), comprising:

a display panel (Anderson: 216) configured to display image data (Anderson: see paragraph [0030].);

a graphics processor in communication with the display panel (Anderson: 206 includes a graphics processor for generating the image displayed on the display 216, see paragraph [0028].);

a draw manager in communication with the graphics card (The phrase "the graphics card" lacks antecedent basis, thus, it will be interpreted to be "the graphics processor". The program in Anderson for generating the display screen shown in figures 5-7 is a draw manager since it manages the drawing of displayed desktop.); and

an application buffer in communication with the draw manager (Anderson is silent about using an application buffer, however, since each desktop has an active window, see paragraphs [0037] and [0044], then Anderson is suggesting that an area in memory 204 is associated with each desktop. Hirosawa teaches an application buffer VBUF 38 for application LAAP1 and an application buffer LBUF 37 for application LAPP2.), the application buffer configured to receive the image data from an application (In Hirosawa the application buffer receives image data from its respective application LAPP1, LAPP2, etc), the application buffer further configured to transmit the image data to the draw manager at a first rate (Anderson: The program which draws the desktop image receives the desktop from its corresponding application. Hirosawa: VBUF 38 and LBUF 37 transmits image data to RBUF39 via OS 17.), wherein the draw manager is configured to determine a rate of updating an object of the display image through manipulation of the image data received from the application buffer (Hirosawa: The program in the local machine 5 will control the rate of updating an object of the display image on video terminal 16. Anderson: The animation program will control the rate of updating an object of the displayed image through manipulation of the image data received from the application by an animation process which would inherently include interpolation.). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Anderson such that an application buffer receives image data from an application such as Anderson's desktop with active application because this will allow the plural active applications to maintain a current image accessible by the draw manager which displays the image data on a display as taught by Hirosawa at

column 2 lines 35-41, column 3 lines 5-11, column 3 lines 46-54, and column 13 lines 9-25.

Claim 2:

Anderson as modified above teaches the system of claim 1, wherein the draw manager manipulates the image data received from the application buffer through interpolation of sequential image data because in Anderson the animation program will control the rate of updating an object of the displayed image through manipulation of the image data received from the application by an animation process which would inherently include interpolation.

Claim 3:

Anderson as modified above teaches the system of claim 1, wherein the draw manager includes a memory module and draw manager logic because in Anderson the portion of the computer program which generates the display screen shown in figures 5-7 is a draw manager since it manages the drawing of displayed desktop which draw manager inherently has memory for storing the results of the draw manager's logic.

Claim 4:

The combination of Anderson and Hirosawa teaches the system of claim 1, wherein the first rate is faster than the rate of updating an object of the display image. In Anderson the application may update any portion of the image faster than an entire image may be displayed on the display due to the refresh rate of the display. Hirosawa measures signals which suggests the rate of data from the LAPP1, LAPP2, etc is faster than the rate the display is refreshed, see column 2 lines 35-41. In view of Hirosawa, it

Art Unit: 2628

would have been obvious to modify Anderson such that the active applications will provide image data more quickly than the refresh rate of the display because this will ensure that quickly changing application data will be displayed promptly on the display, such as measurement data.

Claim 5:

The combination of Anderson and Hirosawa teaches the system of claim 1, wherein the draw manager is configured to selectively optimize the rate of updating the object based upon an operating system type and the graphics processor because one of ordinary skill in the art at the time of applicants invention would selectively optimize the generation of the display image and the display refresh to the hardware and software components. Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicants invention to selectively optimize Anderson's draw manager to the hardware and software components in order to present to the user an updated displayed image of the application's desktop.

Claim 6:

The combination of Anderson and Hirosawa teaches the system of claim 1, further comprising:

a user interface manager enabling a windowing environment for the application, where the application occupies an entire viewable area of a display screen without alerting other applications whether the other applications have lost or gained focus. Hirosawa allows the user to display an application in full screen mode, see column 8 lines 5-17. As discussed above at column 3 lines 47-54 and column 13 lines 9-25

Art Unit: 2628

Hirosawa allows the plurality of applications to operate independently. Anderson displays each desktop in full screen mode allowing the active window to be displayed on the full screen desktop. In view of Hirosawa it would have been obvious to one of ordinary skill in the art to modify Anderson such that each active window is not alerted whether it has lost or gained focus because this will allow the user to quickly switch the display of active windows since the image data needed for the display will have already been generated by the application and stored for quick access in the application buffer.

Claim 7:

The combination of Anderson and Hirosawa teaches the system of claim 6, wherein the user interface manager includes,

logic for writing application data from a plurality of applications to corresponding application buffers (As discussed above Hirosawa has an application buffer VBUF 38, UBUF 37, etc for each active application. As discussed above in the discussion of claim 1 Anderson is silent about using an application buffer, however, since each desktop has an active window, see paragraphs [0037] and [0044], then Anderson is suggesting that an area in memory 204 is associated with each desktop.);

logic for enabling a first one of a plurality of application buffers to write data to the draw manger (Hirosawa: at least the communication control program 80. Anderson: 206.);

logic for displaying user interface data within the entire viewable area of the display panel from the draw manager (Hirosawa: communication control program 80, control tables 40, 41, and 42. Anderson: 206 and figure 13B.); and

logic for switching from a first one of the plurality of application buffers writing data to the draw manager to a second one of the plurality of application buffers while each of the plurality of applications continues to write application data to corresponding application buffers (Hirosawa: communication control program 80; control tables 40, 41, and 42, and column 8 lines 5-17 and column 5 line 41 to column 6 line 7. Anderson: 206 and figure 13B). In view of Hirosawa it would have been obvious to one of ordinary skill in the art to modify Anderson such that each active window has an application buffer because this will allow the user to quickly switch the display of active windows since the image data needed for the display will have already been generated by the application and stored for quick access in the application buffer.

Claim 8:

The combination of Anderson and Hirosawa teaches the user interface manager of claim 7, wherein each logic element is one of or a combination of hardware and software because each of Anderson and Hirosawa are implemented by one of or a combination of hardware and software to implement.

Claim 9:

The combination of Anderson and Hirosawa teaches a draw manager configured to optimize updating of a display being presented, comprising:

a memory module (Hirosawa RBUF 39.) for receiving image data from an application buffer (Anderson is silent about using an application buffer, however, since each desktop has an active window, see paragraphs [0037] and [0044], then Anderson is suggesting that an area in memory 204 is associated with each desktop. Hirosawa

Art Unit: 2628

teaches an application buffer VBUF 38 for application LAAP1 and an application buffer LBUF 37 for application LAPP2.);

logic for transmitting the image data for display (Hirosawa: communication control program 80, control tables 40, 41, and 42. Anderson: 206 and figure 13B.);

logic for determining an update time period for the image data being displayed (Hirosawa: The program in the local machine 5 will control the rate of updating an object of the display image on video terminal 16. Anderson: The animation program will control the rate of updating an object of the displayed image through manipulation of the image data received from the application by an animation process which would inherently include interpolation.);

and

logic for transmitting updated image data for display according to the update time period (Hirosawa: communication control program 80, control tables 40, 41, and 42. Anderson: 206 and figure 13B which is a flow chart illustrating the animation.). It would have been obvious to one of ordinary skill in the art at the time of applicants invention to modify Anderson such that an application buffer receives image data from an application such as Anderson's desktop with active application because this will allow the plural active applications to maintain a current image accessible by the draw manager which displays the image data on a display as taught by Hiroswawa at column 2 lines 35-41, column 3 lines 5-11, column 3 lines 46-54, and column 13 lines 9-25.

Art Unit: 2628

Claim 10:

The combination of Anderson and Hirosawa teaches the draw manager of claim 9, wherein each logic element is one of or a combination of hardware and software because each of Anderson and Hirosawa are implemented by one of or a combination of hardware and software to implement.

Claim 11:

The combination of Anderson and Hirosawa teaches the draw manager of claim 9, wherein the logic for determining an update time period for the image data being displayed includes, logic for capturing the updated image data upon the expiration of successive update time periods because the animation of Anderson leads to the final image which is considered to be the claimed "capturing".

Claim 12:

Anderson as modified above teaches the draw manager of claim 11, further comprising:

logic for manipulating the captured updated image data prior to presentation, the logic for manipulating being configured to perform interpolation between values associated with previous image data and values associated with the captured updated image data because in Anderson the animation program will control the rate of updating an object of the displayed image through manipulation of the image data received from the application by an animation process which would inherently include interpolation.

Art Unit: 2628

Claim 14:

The combination of Anderson and Hirosawa teaches a method for providing efficient updates for a display screen associated with a telematics system, comprising:

writing data to an application buffer at a first rate (Anderson is silent about using an application buffer, however, since each desktop has an active window, see paragraphs [0037] and [0044], then Anderson is suggesting that an area in memory 204 is associated with each desktop. Hirosawa teaches an application buffer VBUF 38 for application LAAP1 and an application buffer LBUF 37 for application LAPP2.);

writing the data from the application buffer to a draw manager (The program in Anderson for generating the display screen shown in figures 5-7 is a draw manager since it manages the drawing of displayed desktop.);

determining a second rate for updating a display presented on the display screen, the second rate being a less frequent rate than the first rate (Hirosawa: The program in the local machine 5 will control the rate of updating an object of the display image on video terminal 16. Hirosawa measures signals which suggests the rate of data from the LAPP1, LAPP2, etc is faster than the rate the display is refreshed, see column 2 lines 35-41. Anderson: In Anderson the application may update any portion of the image faster than an entire image may be displayed on the display due to the refresh rate of the display.);

defining updated image data, the defining including,

performing an interpolation between values associated with most recent image data of the draw manager and values associated with previous image data of the draw

Art Unit: 2628

manager (In Anderson the animation program will control the rate of updating an object of the displayed image through manipulation of the image data received from the application by an animation process which would inherently include interpolation.); and

updating the display presented on the display screen with the updated image data (In Anderson during the animation process the updated image is displayed.). It would have been obvious to one of ordinary skill in the art at the time of applicants invention to modify Anderson such that an application buffer receives image data from an application such as Anderson's desktop with active application because this will allow the plural active applications to maintain a current image accessible by the draw manager which displays the image data on a display as taught by Hirosawa at column 2 lines 35-41, column 3 lines 5-11, column 3 lines 46-54, and column 13 lines 9-25.

Claim 15:

The combination of Anderson and Hirosawa teaches the method of claim 14, wherein the draw manager includes a system buffer because Hirosawa's RBUF39 is a system buffer and Anderson's system memory 204 is a system buffer both of which are used by the "draw manager".

Claim 16:

The combination of Anderson and Hirosawa teaches the method of claim 15, wherein a plurality of application buffers are capable of writing to the system buffer because Hirosawa's RBUF39 is a system buffer that is written to by application buffers VBUF 38 and LBUF 39 and Anderson's system memory 204 is a system buffer which is

Art Unit: 2628

written to by the active window in each of the desktops. Thus the above modification of Anderson has a plurality of application buffers capable of writing to the system buffer.

Claim 17:

The combination of Anderson and Hirosawa teaches the method of claim 14, wherein the method operation of determining a second rate for updating a display presented on the display screen includes, optimizing the second rate based upon an operating system type and a graphics processor type because one of ordinary skill in the art at the time of applicants invention would optimize the generation of the display image and the display refresh to the hardware and software components. Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicants invention to optimize Anderson's draw manager to the hardware and software components in order to present to the user an updated displayed image of the application's desktop.

Claim 18:

The combination of Anderson and Hirosawa teaches the method of claim 14, further comprising:

continually writing data to the application buffer when the data from the application buffer is not being presented on the display screen because each application in Hirosawa operates without knowledge of its focus, thus, it continuously writes to the application buffer VBUF 38 and LBUF 39 as the application measures signals and because in Anderson each active application in each desktop is kept active which means to one of ordinary skill in the art the application will continues its

processing even when out of focus. In view of Hirosawa it would have been obvious to one of ordinary skill in the art to modify Anderson such that each active window is not alerted whether it has lost or gained focus because this will allow the user to quickly switch the display of active windows since the image data needed for the display will have already been generated by the application and stored for quick access in the application buffer.

Claim 19:

The combination of Anderson and Hirosawa teaches the method of claim 14, wherein the method operation of writing the data from the application buffer to a draw manager includes,

selecting the application buffer from a plurality of application buffers, wherein each of the application buffers receiving data from a corresponding application, each corresponding application performing as if data from each corresponding application has focus of the display screen because Hirosawa allows the plurality of applications to operate independently as discussed at column 3 lines 47-54 and column 13 lines 9-25 and because in Anderson each active application in each desktop is kept active which means to one of ordinary skill in the art the application will continues its processing even when out of focus. In view of Hirosawa it would have been obvious to one of ordinary skill in the art to modify Anderson such that each active window is not alerted whether it has lost or gained focus because this will allow the user to quickly switch the display of active windows since the image data needed for the display will have already been generated by the application and stored for quick access in the application buffer.

Claim 20:

The combination of Anderson and Hirosawa teaches the method of claim 14,
further comprising:

repeating the defining of the updated image data; and

repeating the updating of the display with the updated image data because
Anderson's animation repeats the defining process until the animation is complete. 3

12. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over
Anderson et al., US Patent Application Publication no. 2003/0189597, in view of
Hirosawa et al., US Patent no. 4,550,386, and in view of applicants admission of the
prior art at paragraphs [0003]-[0008]. Claim 13 claims the draw manager of claim 9,
wherein the draw manager is a component of a telematics system incorporated into a
vehicle. Anderson is silent with regards to placing the computer into a vehicle.
Applicants admission of the prior art discusses placing computers into vehicles for
various reasons. In view of this it would have been obvious to one of ordinary skill in
the art at the time of applicants invention to place the above combination of Anderson
and Hirosawa into a vehicle because this will place a computer into a vehicle which will
allow the user to quickly switch the display of an active application quickly which quickly
gives to the user up to date information.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Church, US Patent Application Publication no. 2003/0006892, teaches with regard to paragraph [0038] displaying a single application window at a time.

Pauley, US Patent no. 5,900,916, teaches with regards to figure 7 a plurality of channels that generate image data without being informed that most are out of focus.

Kowalski, US Patent no. 5,977,990, teaches a plurality of processors 121-124 where each processor writes to an interim buffer 131-134 simultaneously.

Jobs et al., US Patent no. 6,957,395, teaches a single window mode of operation where non-active windows are automatically minimized.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffery A Brier whose telephone number is (571) 272-7656. The examiner can normally be reached on M-F from 7:00 to 3:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi, can be reached at (571) 272-7664. The fax phone Number for the organization where this application or proceeding is assigned is 571-273-8300.

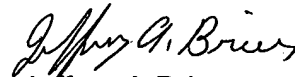
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Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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